

ARTICLE 4

GAS SYSTEMS

SUBARTICLE 1

GENERAL

103-400. Authorization of Rules.

A. Section 58-5-210 of the Code of Laws of South Carolina, 1976, provides: "That the Public Service Commission is hereby, to the extent granted, vested with power and jurisdiction to supervise and regulate the rates and service of every 'Public Utility' in this State as defined in this Act, together with the power, after hearing, to ascertain and fix such just and reasonable standards, classifications, regulations, practices and measurements of service to be furnished, imposed, observed and followed by every public utility in this State, and the State hereby asserts its rights to regulate the rates and services of every 'Public Utility' as herein defined."

In accordance with the above provisions, the Public Service Commission has adopted the following Rules and Regulations and fixed the following standards for gas service to become effective June 30, 1976. All previous rules or standards are hereby revoked, annulled, and superseded.

B. S. C. Code Ann. § 58-5-970 (1976), provides that the Public Service Commission "is authorized to adopt and enforce the minimum Federal Safety Standards for the transportation of gas and pipeline facilities established by the Secretary of Transportation pursuant to Section 3(b) of the Natural Gas Pipeline Safety Act of 1968 as may be amended from time to time".

C. The adoption of these rules shall in no way preclude the Public Service Commission from altering, amending or revoking them in whole or in part, or from requiring any other or additional service, equipment, facility or standard, either upon complaint or upon its own motion, or upon the application of any utility.

Furthermore, these rules shall not in any way relieve either the Commission or the utilities of any duties under the laws of this State.

103-401. Application of Rules.

1. Jurisdiction. These rules shall apply to any person, firm, partnership, association, establishment, or corporation which is now or may hereafter become engaged as a public utility in the business of furnishing gas to any gas customer within the State of South Carolina, except where municipalities or agents thereof, and/or any gas authorities are specifically exempted by statute.

2. Purpose. The rules are intended to define good practice. They are intended to insure adequate and reasonable service. The utilities shall assist the Commission in the implementation of these rules and regulations.

3. Waiver of Rules. In any case where compliance with any of these rules and regulations introduces unusual difficulty or where circumstances indicate that a waiver of one or more rules or regulations is otherwise appropriate, such rules or regulations may be waived by the Commission upon a finding by the Commission that such waiver ~~be in~~ is not contrary to the public interest.

103-402. Definitions.

The following words and terms, when used in these rules, shall have the meaning indicated:

1. Commission. "Commission" means the Public Service Commission of South Carolina.

2. Customer. "Customer" means any person, firm, association, establishment, partnership or corporation, or any agency of the Federal, State, or local government, being supplied with gas service by a gas utility under the jurisdiction of this commission.

~~2. Gas Utility. "Gas Utility" includes every privately-owned corporation, firm or person furnishing or supplying gas service to the public, or any portion thereof, for compensation. Provided, however, this term shall not include any gas utility owned or operated by any municipality or agency thereof; nor shall it include any gas utility owned or operated by any gas authority specifically exempted by statute from the jurisdiction of the Commission.~~

~~3. Customer. "Customer" means any person, firm, association, establishment, partnership or corporation, or any agency of the Federal, State, or local government, being supplied with gas service by a gas utility under the jurisdiction of this Commission.~~

3. Gas. "Gas" or "Natural Gas" means either natural gas unmixed, or any mixture of natural and manufactured gas, including but not limited to, synthetic natural gas and liquefied petroleum.

4. Gas Service. "Gas Service" means those functions performed by a gas utility for its customers, including the purchase and/or manufacture of gas, storage of gas, transportation and delivery of gas to the customer.

45. "Gas System" includes all gas utilities operating within this State, including gas authorities, municipalities, public service districts and other political subdivisions of this State insofar as they are within the jurisdiction of the Commission for regulation of safety standards and conditions, pursuant to S. C. Code Ann. § 58-5-920(f) (1976).

6. Gas Utility. "Gas Utility" includes every privately-owned corporation, firm or person furnishing or supplying gas service to the public, or any portion thereof, for

compensation. Provided, however, this term shall not include any gas utility owned or operated by any municipality or agency thereof; nor shall it include any gas utility owned or operated by any gas authority specifically exempted by statute from the jurisdiction of the commission.

57. Municipality. "Municipality" includes a city, town, county, township and any other corporation existing, created or organized as a governmental unit under the Constitution and Laws of this State.

8. ORS. "ORS" means the Office of Regulatory Staff.

69. Rate. "Rate" when used in these Rules and Regulations means and includes every compensation charge, toll, rental, and classification, or any of them, demanded, observed, charged or collected by any gas utility for any gas service offered by it to the public, and any rules, regulations, practices or contracts affecting any such compensation, charge, toll, rental or classification.

~~7. Gas. "Gas" or "Natural Gas" means either natural gas unmixed, or any mixture of natural and manufactured gas, including but not limited to, synthetic natural gas and liquefied petroleum.~~

~~8. Gas Service. "Gas Service" means those functions performed by a gas utility for its customers, including the purchase and/or manufacture of gas, storage of gas, transportation and delivery of gas to the customer.~~

103-403. Authorization for Rates and Charges.

A. All rates, tolls and charges proposed to be put into effect by any gas utility shall be first approved by this €commission before they shall become effective, unless they are exempt from such approval by statute, Order of this €commission, or other provision of law.

B. No schedule of rates, tolls, or charges under jurisdiction of the €commission, differing from the approved tariffs or rates, shall be changed until after proposed change has been approved by the €commission.

C. No rates, tolls, charges, nor service of any gas utility shall be deemed approved nor consented to by mere filing of schedules or other evidence thereof in the offices of the €commission, unless such proposed adjustment is made in accordance with tariff provisions which have previously been approved by the €commission.

D. All contracts between any industrial customer and any gas utility which establish or adjust rates for that industrial customer may become effective as of the dates of the contracts unless disapproved or modified by the €commission in the public interest. Such contracts shall be provided to the ORS and filed with the €commission within seven (7) days of execution.

103-404. Territory and Certificates.

A. No public utility supplying gas to the public shall hereafter begin the construction or operation of any gas facility, or of any extension thereof, without first obtaining from the ~~E~~commission a certificate that public convenience and necessity requires or will require such construction or operation; such certificate to be granted only after notice to ORS, other interested gas utilities and to the public, and after due hearing; provided, however, that this regulation shall not be construed to require any such gas utility to secure a certificate for any extension within any municipality or district within which it has heretofore lawfully commenced operations, or for an extension within or to territory already served by it, necessary in the ordinary course of its business, or for an extension into territory contiguous to that already occupied by it and not receiving similar service from another gas utility; but if any gas utility in constructing or extending its lines, plant or facilities unreasonably interferes, or is about to unreasonably interfere, with the service or system of any other gas utility, the ~~E~~commission may make such order and prescribe such terms and conditions in harmony with this regulation as are just and reasonable.

B. The term "public utilities supplying gas to the public" shall include all utilities supplying gas to the public, including natural gas and manufactured gas when such manufactured gas is used to supplement flowing gas supply.

103-405. Utility Rules and Regulations.

Each gas utility shall adopt such rules, regulations, practices, service requirements, terms and conditions, etc. as may be necessary in the operation of gas service to its customers which shall be provided to the ORS and filed with and subject to review and order of the ~~E~~commission, unless otherwise specified.

SUBARTICLE 2

RECORDS AND REPORTS

103-410. Location of Records and Reports.

All records required by these rules or necessary for the administration thereof, shall be kept within this State, unless otherwise authorized by the ~~E~~commission. These records shall be available for examination by the ~~Commission or its authorized representatives~~ ORS at all reasonable hours.

103-411. Retention of Records.

1. Retention Period. Unless otherwise specified by the ~~E~~commission or by regulations governing specified activities, all records required by these rules and regulations shall be preserved for two years.

2. Test and Inspection Records. A complete record shall be kept of all tests and inspections made under these rules as to the quality or condition of service which it

renders.

3. Contents of Test Records. All records of tests shall contain complete information concerning the test, including the date, hour, and place where the test was made; the name of the person making the test and the result.

103-412. Data to be Filed with the Commission and Provided to the ORS.

1. Annual Report. Each gas utility operating in this State shall make an annual report to the Commission and ORS giving such information as the Commission may direct.

2. Current Information and Documents. The gas utilities shall file with the Commission and provide to the ORS the following documents and information.

2.1. Tariff. A copy of the gas utility's tariff which shall include:

A. A copy of each schedule of rates for service, together with applicable riders.

B. A copy of the gas utility's rules or terms and conditions, describing the gas utility's policies and practices in rendering jurisdictional gas service. These rules shall include:

1. The minimum and maximum heating value of the gas in BTU's per cubic foot.

2. A list of the classes of items which the gas utility furnishes and maintains on the customer's premises, such as service pipe, meters, regulators, vents and shutoff valves.

3. A statement indicating the minimum number of days allowed for payment of the gross amount of the customer's bill before service will be discontinued for non-payment.

4. A statement indicating the volumetric measurement base to which all sales of gas at other than standard delivery pressure are corrected.

C. Tariffs must be filed with the office of the Chief Clerk of the commission and, on that same day, provided to the Executive Director of the ORS.

2.2. Customer Bill. A copy of each type of bill form used in billing for gas service.

2.3. Operating Area Map. A map showing the gas utility's operating area. This map shall be revised annually unless such revision is unnecessary, in which event the utility shall notify the Commission and ORS that the map on file is current. The map should show:

a. Gas production plant.

b. Principal storage facilities.

c. Transmission lines and principal mains by size and valves located thereon.

- d. System metering (supply) points.
- e. State boundary crossings.
- f. Certified area and/or territory served.
- g. Names of all communities (post offices) served.

2.4. Authorized Representative. The gas utility shall advise the ~~Commission~~ and ORS of the name, title, address and telephone number of the person or persons who should be contacted in connection with:

- a. General management duties.
- b. Customer relations (complaints).
- c. Engineering and/or operations.
- d. Meter tests and repairs.
- e. Emergencies during non-office hours.

2.5. Contract Forms. A copy of the gas utility's gas service contract forms, and special gas service contract forms.

2.6. Pipeline Safety. All gas systems subject to pipeline safety regulation shall file with the ~~Commission~~ and provide to the ORS those reports, policies and procedures required by the regulations to include, but not limited to, the following:

- a. Inspection and maintenance manual.
- b. Emergency plan.
- c. Construction specifications.
- d. Welding procedures.
- e. Procedures for corrosion control.
- f. Annual reports as required by the Office of Pipeline Safety.
- g. Reports of leaks which involve property damage in excess of \$5000. After the gas utility conducts its investigation, if it finds that the property damage does not exceed \$5000, the gas utility shall notify the affected customer of its findings in writing by certified mail. This notification shall inform the customer that the gas utility has not reported the incident to the Office of Regulatory Staff because its investigation concluded

that the property damage from the leak did not exceed \$5000. Further, the notification shall inform the customer that if the customer disagrees with the gas utility's findings that the customer can file a written complaint with the commission and provide a copy of the complaint to the ORS. The gas utility shall include the commission's name and address and the ORS's name and address in the notice to the customer.

2.7. Construction Costs. All gas systems subject to pipeline safety regulation shall notify the ~~€~~commission and ORS of any construction projects with costs of \$1,000,000 or more.

103-413. Inspection of Utility Plant.

A. Each gas utility shall, upon request of the ~~€~~commission or ORS, ~~file with the Commission~~ provide to the ORS a statement regarding the condition and adequacy of its plant, equipment, facilities and service in such form as the ~~€~~commission may require.

B. Each gas utility shall keep sufficient records to give evidence of compliance with its inspection program.

103-414. Interruption of Service.

Each gas utility shall keep a record of any condition resulting in any interruption of service affecting its entire system or major division thereof, or any major community or any important division, consisting of at least fifty customers, of a community, including a statement of the time, duration and cause of such interruption. The ~~€~~commission and ORS ~~is are~~ to be notified by telephone of any such interruption as soon as practicable after it comes to the attention of the gas utility and a complete written report made to the ~~€~~commission and ORS after restoration of service, if such interruption is more than 6 hours in duration.

103-415. Accidents.

A. Each gas system shall, as soon as possible, report by telephone to the ~~Commission~~ ORS each accident happening in connection with the operation of its property, facilities, or service, wherein any person shall have been killed or hospitalized with injuries or whereby such reporting is required by Subarticle 8. Such telephonic report shall later be supplemented by written reports if required by Subarticle 8. Each gas system shall, as soon as possible, report by telephone to the ~~Commission~~ ORS all gas leaks not reportable under the above criteria, but resulting in property damage in excess of \$5,000. Such telephonic report shall later be supplemented by written report giving the cause and other details of the incident. After the gas utility conducts its investigation, if it finds that the property damage does not exceed \$5000, the gas utility shall notify the affected customer of its findings in writing by certified mail. This notification shall inform the customer that the gas utility has not reported the incident to the Office of Regulatory Staff because its investigation concluded that the property damage from the accident did not exceed \$5000. Further, the notification shall inform the customer that if the customer disagrees with the gas utility's findings that the customer can file a written complaint with the

commission and provide a copy of the complaint to the ORS. The gas utility shall include the commission's name and address and the ORS's name and address in the notice to the customer.

B. Each gas system shall establish procedures for analyzing accidents for the purpose of determining the causes and minimizing the possibilities of recurrences.

103-416. Complaints.

Complaints concerning the charges, practices, facilities, or services of the utility shall be investigated promptly and thoroughly. Each gas utility shall keep a record of all such complaints received, which record shall show the name and address of the complainant, the date and character of the complaint, and the adjustment or disposal made thereof.

103-417. Meter History.

Each gas utility shall maintain records of the following data, where applicable, for each billing meter for so long as such meter is in possession of the gas utility and for twelve months thereafter.

- a. Date of purchase.
- b. The complete identification--manufacturer, number, type, size, capacity, multiplier, and constants.
- c. The current and last previous locations, and the dates of installation at and removal from service at such locations.
- d. Repairs.

103-418. Meter Test Records and Reports.

A. Each gas utility shall maintain records of at least the last two tests made of any billing meter. The record of the meter test made at time of the meter's retirement shall be maintained for a minimum of two (2) years. Test records shall include the following:

1. The date and reason for the test.
2. The reading of the billing meter before making any test.
3. The accuracy "as found" at check and open rated flow.
4. The accuracy "as left" at check and open rated flow.
5. In the event test of the meter is made by using a test meter or a flow prover, the gas

utility shall retain all data taken at the time of the test in sufficiently complete form to permit the convenient checking of the test methods and the calculations.

B. Whenever any gas service meter is tested the original test record shall be preserved, including the information necessary for identifying the meter, the reason for making the test, the reading of the meter upon removal from service, and the result of the test, together with all data taken at the time of the test in sufficiently complete form to permit convenient checking of the methods employed and the calculations.

SUBARTICLE 3

METERS

103-420. Meter Requirements.

1. General. Service shall be measured by meters furnished by the gas utility unless otherwise authorized by the Commission, and such meters shall maintain the degree of accuracy as set forth in 103-423.

2. Measurement. Where applicable, each gas meter shall indicate clearly the unit of gas registered by such meter. Where gas is metered under high pressure, or where the quantity is determined by calculation from recording devices, the gas utility shall, when requested, supply the customer with such information as will make clear the method by which the quantity is determined.

3. Absorptive-Type Diaphragms. No meter removed from service equipped with an absorptive-type diaphragm shall be returned to service, unless such meter has been equipped with a non-absorptive type diaphragm.

103-421. Meter Reading.

Unless extenuating circumstances prevent, meters shall be read and bills rendered on a monthly basis of not less than 28 days nor more than 34 days.

103-422. Meter Reading Sheet, Card, or Instrument.

The meter reading sheets, cards, or instruments shall show:

- a. Customer's name and service address.
- b. Identifying number and/or description of the meter(s).
- c. Meter Readings.
- d. If the reading has been estimated.

e. Location of meter on premises.

103-423. Meter Accuracy and Condition.

A. Every gas meter, whether new, repaired, or removed from service for any cause, shall be in good order before being installed for the use of any customer and shall be correct to within the limits prescribed in 103-475(5).

B. Care shall be taken to insure that every gas meter being transported or stored to install or test for the use of any customer is handled in a manner that will not affect the condition of such meter.

103-424. Meter Seal.

Immediately after the pre-installation tests or field tests of a billing meter on other billing device, a seal shall be affixed or other means provided, where practical, designed to discourage or reveal tampering or theft of gas.

103-425. Location of Meter.

A. No customer's meter shall be installed in any location where it may reasonably be expected to be exposed to damage or in any unduly dirty or inaccessible location.

B. Outdoor meters shall be used where practicable.

103-426. Change in Character of Service.

A. In order that the gas utility may provide a proper service facility and metering installation, the customer shall advise the gas utility of the expected service requirements and shall also advise the gas utility of any increase or decrease in the load to be provided by the gas utility in sufficient time to change service characteristics.

B. In case any substantial change is made by the gas utility in the service conditions which would affect the operation or adjustment of appliances of customers, the affected appliances shall be readjusted by the gas utility for the conditions without charge.

SUBARTICLE 4

CUSTOMER RELATIONS

103-430. Customer Information.

Each gas utility shall:

a. Maintain up-to-date maps, plans, or records of its entire transmission and distribution systems, with such other information as may be necessary to enable the gas utility to advise prospective customers, and others entitled to the information, as to the facilities

available for serving customers within its operating area.

b. Notify each affected customer in writing, as prescribed by ~~this~~ the ~~E~~commission, of any proposed change in rates and charges. Unless the ~~E~~commission orders otherwise, this notice requirement shall not apply to Purchased Gas Adjustments, Curtailment Adjustments, and Exploration Adjustments. Certification that the above notice requirement has been met shall be furnished to the ~~E~~commission and ORS by the gas utility.

c. Post a notice in a conspicuous place in each office of the gas utility where applications for service are received, informing the public that copies of the rate schedules and rules relating to the service of the gas utility, as ~~filed with and~~ approved by the ~~E~~commission, are available for inspection at the gas utility.

d. Upon request, inform its customers as to the method of reading meters, as to billing procedures, and shall assist customers in selecting the most economical rate schedule applicable and method of metering the service, except as otherwise provided for by the ~~E~~commission.

e. Each gas system shall provide adequate means (telephone, etc.) whereby each customer can contact the gas system or authorized representative at all hours in cases of emergency or unscheduled interruptions of service.

f. Each gas utility shall, upon request, give its customers such information and assistance as is reasonable and proper in order that customers may secure safe and efficient service.

g. Notify any customer making a complaint recorded pursuant to 103-416, that the gas utility is under the jurisdiction of the ~~E~~commission and the customer may notify the ~~E~~commission and ORS of his complaint.

h. Notify each affected customer of the possibility and degree of anticipated seasonal natural gas curtailments. Such notification shall be sent by the gas utility to its customers as soon as the gas utility becomes aware of the possible imposition of any curtailment. The ~~Commission~~ ORS shall be informed by the gas utility whenever such notification has been given to its customers.

103-431. Customer Deposits.

A. Each gas utility may require from any customer or from any prospective customer, a deposit intended to guarantee payment of bills for service, if any of the following conditions exist:

1. The customer's past payment record to a gas utility shows delinquent payment practice, i.e., customer has had two consecutive 30-day arrears, or more than two non-consecutive 30-day arrears in the past 24 months, or

2. A new customer cannot demonstrate that he is a satisfactory credit risk by appropriate means including, but not limited to, letters of good credit from a reliable source, or references which may be quickly and inexpensively checked by the Company or cannot furnish an acceptable cosigner or guarantor on the same system within the state of South Carolina to guarantee payment, or

3. A customer has no deposit and presently is delinquent in payments, i.e., has had two consecutive 30-day arrears, or more than two non-consecutive 30-day arrears in the past 24 months, or

4. A customer has had his service terminated for non-payment or fraudulent use.

B. Each utility shall inform each prospective customer of the provisions contained in (A) of this rule.

103-432. Amount of Deposit.

A. A maximum deposit may be required up to an amount equal to an estimated two (2) months (60 days) bill for a new customer or a maximum deposit may be required up to an amount equal to the total actual bills of the highest two (2) consecutive months based on the experience of the preceding twelve (12) months or portion of the year, if on a seasonal basis.

B. All deposits may be subject to review based on the actual experience of the customer. The amount of the deposit may be adjusted upward or downward to reflect the actual billing experience and payment habits of the customer.

C. A schedule of deposits based upon an analysis of 60 days usage for categories of customers falling within a specified range may be required by the company upon being provided to the ORS and filed and approved by the Commission.

D. Special offerings may be exempt as determined by the Commission.

103-433. Interest on Deposits.

A. Simple interest on deposits at the rate of the current effective interest rate per annum prescribed by Order of the South Carolina Public Service Commission shall be paid by the gas utility to each customer required to make such deposit for the time it is held by the gas utility, provided that no interest need to be paid unless the deposit is held longer than six (6) months.

B. The interest shall be accrued annually and payment of such interest shall be made to the customer every two (2) years and at the time the deposit is returned.

C. The deposit shall cease to draw interest on the date it is returned, on the date service is terminated, or on the date notice is sent to the customer's last known address that the

deposit is no longer required.

103-434. Deposit Records.

Each gas utility shall keep records as to show:

- a. The name and address of each depositor.
- b. The amount and date of the deposit.
- c. Each transaction concerning the deposits.

103-435. Deposit Receipt.

Each gas utility shall issue a receipt of deposit to each customer from whom a deposit is received and shall provide means whereby a customer may establish his claim if his receipt is lost.

103-436. Deposit Retention.

Deposits shall be refunded completely with interest after two years unless the customer has had two consecutive 30-day arrears, or more than two non-consecutive 30-day arrears, in the past 24 months.

103-437. Unclaimed Deposit.

A record of each unclaimed deposit must be maintained for at least ~~two (2)~~ one (1) years, during which time the gas utility shall make a reasonable effort to return the deposit. Unclaimed deposits, together with accrued interest, shall be turned over to the South Carolina ~~Tax Commission~~ State Treasurer as prescribed by state law.

103-438. Deposit Credit.

Where a customer has been required to make a guarantee deposit, this shall not relieve the customer of the obligation to pay the service bills when due. Where such deposit has been made and service has been discontinued for reason of non-payment of bill or otherwise, a gas utility shall apply the deposit of such customer toward the discharge of such account and shall as soon thereafter as practicable, refund the customer any excess of the deposit. If, however, the customer whose service has been disconnected for non-payment, pays the full amount billed within 72 hours after service has been disconnected and applies for reconnection, the gas utility may not charge an additional deposit except under the provisions of 103-432.

103-439. Customer Billing.

The gas utility shall bill each customer as promptly as practicable following the reading

of his meter and render a receipt of payment upon request.

1. New Service. Meters shall be read at the initiation and termination of any service and billing shall be based thereon.

2. Bill Forms. The bill shall show:

a. The reading of the meter at the beginning and at the end of the period for which the bill is rendered.

b. The date on which the meter was read, and the date of billing and the latest date on which it may be paid without incurring a penalty and the method of calculating such penalty.

c. The number and kind of units metered.

d. The applicable rate schedule, or identification of the applicable rate schedule. If the actual rates are not shown, the bill should carry a statement to the effect that the applicable rate schedule will be furnished on request.

e. Any estimated usage shall be clearly marked with the word "estimate" or "estimated bill".

f. Any conversions from meter reading units to billing units or any information necessary to determine billing units from recording or other devices, or any other factors, such as PGA or BTU adjustments, used in determining the bill. In lieu of such information on the bill, a statement must be on the bill advising that such information can be obtained by contacting the gas utility's local office.

g. Amount for gas usage.

h. Amount of South Carolina Sales Tax (dollars and cents).

i. Total amount due.

j. Number of days for which bill is rendered or beginning and ending dates for the billing period.

3. Late Payment Charges. A maximum of one and one-half percent (1 1/2 %) may be added to any unpaid balance not paid within 25 days of the billing date to cover the cost of collection and carrying accounts in arrears. This method of late-payment charge will be made in lieu of any other penalty.

4. Payment by Check. The gas utility, at its option for good cause, may refuse to accept a check tendered as payment on a customer's account.

5. Charges for Discontinuance and Reconnection. Whenever service is turned off for violation of rules or regulations, non-payment of bills or fraudulent use of service, the gas utility may make a reasonable charge, to be approved by ~~this~~ the ~~C~~commission, for the cost incurred in discontinuing the service and reconnection and require payment for service billed and for service used which has not previously been billed.

6. Estimated Bills. Each gas utility shall not send a customer an estimated bill except for good cause where the meter could not be read or was improperly registering. No more than one estimated bill shall be rendered within a 60 day period, unless otherwise agreed to by the customer.

103-440. Adjustment of Bills.

If it is found that a gas utility has directly or indirectly, by any device whatsoever, demanded, charged, collected or received from any customer a greater or less compensation for any service rendered or to be rendered by such gas utility than that prescribed in the schedules of such gas utility applicable, thereto then filed in the manner provided in Title 58 of the South Carolina Code of Laws or if it is found that any customer has received or accepted any service from a gas utility for a compensation greater or less than that prescribed in such schedules; or if, for any reason, billing error has resulted in a greater or lesser charge than that incurred by the customer for the actual service rendered, then the method of adjustment for such overcharge or undercharge shall be as provided by the following:

1. Fast or Slow Meters. If the overcharge or undercharge is the result of a fast or slow meter, then the method of compensation shall be as follows:

a. In case of a disputed account, involving the accuracy of a meter, such meter shall be tested upon request of the customer, as specified in 103-472.

b. In the event that the meter so tested is found to have an error in registration of more than two (2) percent, the bill shall be increased or decreased accordingly, if the time at which the error first developed or occurred can be definitely determined. If such time cannot be determined, such correction shall not be made for more than six (6) months.

2. Customer Wilfully Overcharged. If the gas utility has wilfully overcharged any customer, except as provided for in 1 of this rule, then the method of adjustment shall be as provided in S. C. Code Ann., § 58-5-370 (1976).

3. Customer Inadvertently Overcharged. If the gas utility has inadvertently overcharged a customer as a result of a misapplied schedule, an error in reading the meter, a skipped meter reading, or any other human or machine error except as provided in 1 of this rule, the gas utility shall at the customer's option credit or refund the excess amount paid by that customer or credit the amount billed as prescribed by the following:

a. If the interval during which the customer was overcharged can be determined, then the

gas utility shall credit or refund the excess amount charged during that entire interval, provided that the applicable statute of limitations shall not be exceeded.

b. If the interval during which the customer was overcharged cannot be determined then the gas utility shall credit or refund the excess amount charged during the 12 month period preceding the date when the billing error was discovered.

c. If the exact usage and/or demand incurred by the customer during the billing periods subject to adjustment cannot be determined then the refund shall be based on an appropriate estimated usage and/or demand.

4. Customer Undercharged Due to Wilfully Misleading Company. If the gas utility has undercharged any customer as a result of a fraudulent or wilfully misleading action of that customer, or any such action by any person (other than the employees or agents of the company), such as tampering with, or bypassing the meter when it is evident that such tampering or bypassing occurred during the residency of that customer, or if it is evident that a customer has knowledge of being undercharged without notifying the gas utility as such, then notwithstanding 1 of this rule, the gas utility shall recover the deficient amount provided as follows:

a. If the interval during which the customer was undercharged can be determined, then the gas utility shall collect the deficient amount incurred during that entire interval, provided that the applicable statute of limitations is not exceeded.

b. If the interval during which the customer was undercharged cannot be determined, then the gas utility shall collect the deficient amount incurred during the 12-month period preceding the date when the billing error was discovered by the gas utility.

c. If the usage and/or demand incurred by the customer during the billing periods subject to adjustment cannot be determined, then the adjustment shall be based on the appropriate estimated usage and/or demand.

d. If the metering equipment has been removed or damaged, then the gas utility shall collect the estimated cost of repairing and/or replacing such equipment.

5. Equal Payment Plans. A gas utility may provide equal payment plans, wherein the charge for each billing period is the estimated total annual bill divided by the number of billing periods prescribed by the plan. The difference between the actual and estimated annual bill is to be resolved by one payment at the end of the equal payment plan year, unless otherwise approved by the Commission. However, any incorrect billing under equal payment plan shall be subject to the first paragraph of this rule.

6. Customer Undercharged Due to Human or Machine Error. If the gas utility has undercharged any customer as a result of a misapplied schedule, an error in reading the meter, a skipped meter reading, or any human or machine error, except as provided in 1 and 2 of this rule above, then the gas utility shall recover the deficient amount as

provided as follows:

- a. If the interval during which a customer was undercharged can be determined, then the gas utility may collect the deficient amount incurred during that entire interval up to a maximum period of 12 months.
- b. If the full interval during which a customer was undercharged cannot be determined, then the gas utility may collect only the deficient amount of that portion of the interval that can be determined up to a maximum period of 12 months.
- c. The customer shall be allowed to pay the deficient amount, in equal installments added to the regular monthly bills, over the same number of billing periods which occurred during the interval the customer was subject to pay the deficient amount.
- d. If the usage incurred by that customer during the billing periods subject to adjustment cannot be determined, then the adjustment shall be based on a appropriate estimated usage.

103-441. Applications for Service.

1. Method. Applications for service may be verbal or in writing.
2. Obligation. The applicant shall, at the option of the gas utility, be required to sign a service agreement or contract. In the absence of such a service agreement or contract, accepted application shall constitute a contract between the gas utility and the applicant, obligating the applicant to pay for service in accordance with the gas utility's tariff or rate schedule currently on file with the ~~E~~commission and the ORS, and to comply with the ~~E~~commission's and the gas utility's Rules and Regulations governing service supplied by the gas utility.
3. Termination. When a customer desires to have his service terminated, he must notify the gas utility; such notification may be verbal or in writing. The gas utility shall be allowed a reasonable period of time after receipt of such notice to take a final reading of the meter and to discontinue service.

103-442. Reasons for Denial or Discontinuance of Service.

Unless otherwise stated, a customer shall be allowed a reasonable time in which to correct any discrepancy which may cause discontinued service.

Service may be denied or discontinued for any of the following reasons:

- a. Without notice in the event of a condition determined by the gas utility to be hazardous or dangerous.
- b. Without notice in the event of customer use of equipment in such a manner as to

adversely affect the gas utility's service to others.

c. Without notice in the event of unauthorized or fraudulent use of gas utility service e.g.:

1. Misrepresentation of the customer's identity.
2. For reconnection of service by customer who has had service discontinued for violation of and/or non-compliance with the Ecommission's 103-442 et seq.

d. Tampering

After the customer has applied for and/or received service from the gas utility, he shall make every reasonable effort to prevent tampering with the meter and service lines serving his premises. A customer shall notify the gas utility, as soon as possible, of any tampering with, damage to, or removal of any equipment. Tampering with meters or with lines carrying unmetered gas and unauthorized breaking of utility's seals is prohibited by law and shall not be tolerated by the utility. Such meter tampering shall include but shall not be limited to, unassigned meters, or altered meters. Should the utility find that the meter, service line, or seals have been tampered with, the Gas Utility shall give notice to the customer of possible discontinuance of service. Service may be continued or reconnected consistent with the following:

1. A customer can stop discontinuance of service or have service reconnected by paying a reasonable charge for an inspection (to insure proper operating conditions), a reasonable reconnect fee, and charges to compensate for any damages to the utility's facilities.
2. A customer's bill may be adjusted to reflect normal usage should any tampering reflect other than normal meter readings and the customer's bill may include the establishment of a deposit in accordance with the Ecommission's 103-432 et seq.

Nothing herein shall prevent the gas utility from instituting appropriate legal actions for violations of and/or non-compliances with the Ecommission's 103-442 et seq.

e. For violation of and/or non-compliance with the Ecommission's 103-430 et seq., governing service supplied by the gas utility.

f. For failure of the customer to fulfill his contractual obligations for service and/or facilities subject to regulation by the Ecommission.

g. For failure of the customer to permit the gas utility reasonable access to its equipment.

h. For nonpayment of bill for service rendered provided that the gas utility has made reasonable efforts to effect collection and has complied with the provisions of R.103-452.

i. For failure of the customer to provide the gas utility with a deposit as authorized by 103-431.

- j. For failure of the customer to furnish permits, certificates, and rights-of-way, as necessary in obtaining service, or in the event such permissions are withdrawn or terminated.
- k. For failure of the customer to comply with reasonable restrictions on the use of service, provided that notice has been given to the customer and that written notice has been furnished to the Commission and ORS.
- l. No gas utility shall be required to furnish its service or to continue its service to any applicant who, at the time of such application, is indebted or any member of his household is indebted, under an undisputed bill to such gas utility for service previously furnished such applicant or furnished any other member of the applicant's household. However, for the purposes of this regulation, the gas utility may not consider any indebtedness which was incurred by the applicant or any member of his household more than six (6) years prior to the time of application.
- m. The gas utility may terminate a customer's service should the customer be in arrears on an account for service at another premises.

103-443. Insufficient Reasons for Denying Service.

The following shall not constitute cause for refusal of service to a present or prospective customer:

- a. Non-payment for services by a previous occupant of the premises to be served, unless such previous occupant shall benefit from such new service.
- b. Failure to pay for merchandise purchased from the gas utility.

103-444. Right of Access.

Authorized agents of the gas utility shall have the right of access to premises supplied with gas service at reasonable hours, for the purpose of reading meters, examining facilities and pipes, observing the manner of using service and for any other purpose which is proper and necessary in the conduct of the gas utility's business.

Such agents shall produce proper identification and shall inform the customer of the purpose of necessary access to occupied premises before entry except that agents performing meter reading tasks shall produce such identification and information as to purpose only when requested.

103-445. Customer Complaints.

A. Complaints concerning the charges, practices, facilities, or service of the gas utility, shall be investigated promptly, thoroughly and professionally. The gas utility shall keep

such records of customer complaints as will enable it to review and analyze its procedures and actions.

B. Unless otherwise specified by the ~~Commission~~, when the ~~Commission~~ ORS has notified the gas utility that a complaint has been received concerning a specific account, the gas utility shall refrain from discontinuing the service of that account for the matter which is the subject of the complaint, until the ~~Commission's~~ ORS's investigation is completed, a period not to exceed thirty (30) days from receipt of the complaint by the ~~Commission~~ ORS, and the results have been received by the gas utility. Service shall not be discontinued if the complainant requests in writing a hearing before the commission.

103-446. Contracts, Rate Schedules, Rules and Regulations.

Copies of all schedules of rates for service, contracts for service which involve rates, forms of contracts for service, charges for service connections and extensions of mains, and all rules and regulations concerning the relations between the customer and gas utility, shall be filed with the ~~Commission~~ by each gas utility and shall be subject to prior approval by the ~~Commission~~. All contracts for service between any industrial customer and any gas utility which establish or adjust rates for any industrial customer shall be filed with the ~~Commission~~ by each gas utility and may become effective as of the date of the contracts, unless disapproved or modified by the ~~Commission~~. Complete schedules, contract forms, rules and regulations, etc., as filed with the ~~Commission~~, shall also be available for public inspection at the local offices of the gas utility.

103-447. System Which Gas Utility Must Maintain.

Each gas utility, unless specifically relieved by the ~~Commission~~ from such obligation, shall operate and maintain in safe, efficient and proper conditions all of the facilities and equipment used in connection with the regulation, measurement and delivery of gas to any customer up to and including the point of delivery into the piping owned by the customer.

103-448. System Extensions.

When a prospective customer or customers of a gas utility makes application for service at a point not immediately adjacent to a service facility of a gas utility, and as long as the requirement for such service is reasonable, and the prospective service is in territory assigned by the ~~Commission~~ to the gas utility, the gas utility shall render service under reasonable terms and conditions, unless otherwise authorized by the ~~Commission~~.

103-449. Replacement of Meters.

Whenever a customer requests the replacement of the gas meter on his premises, such request shall be treated as a request for the test of such meter, and, as such, shall fall under the provisions of 103-475, Test Procedures and Accuracies, and shall be subject to the provisions of 103-472.

103-450. Service Entrance Changes.

Whenever a customer requests the gas utility to relocate the gas utility's service entrance, the gas utility may require reasonable charges to cover costs incurred.

103-451. Temporary Service.

When the gas utility renders temporary service to a customer, it may require that the customer bear all cost of installing and removing the service in excess of any salvage realized.

103-452. Procedures for Termination of Service.

Prior to the termination of gas service pursuant to 103-442 e-m, the following procedures shall be employed by the gas utility:

- a. Not less than ten (10) days prior to termination of service, the gas utility shall mail a notice of termination to the affected customer. The notice of termination of service shall include, as a minimum, the following information:
 1. Address, telephone number and working hours of the person(s) to be contacted by the customer for the arrangement of a personal interview with an employee of the gas utility with the authority to accept full payment or make other payment arrangements.
 2. The total amount owed by the customer for gas services rendered, the date and amount of the last payment and the date by which the customer must either pay in full the amount outstanding or make satisfactory arrangements for payment by installments of such amount.
 3. The statement that service to a residential customer during the months of December through March will not be terminated where such customer, or a member of his household at the premises to which service is rendered, can furnish to the utility, no less than (3) days prior to termination of service, or to the terminating crew at time of termination, a certificate on a form provided by the utility and signed by a licensed physician, that termination of gas service would be especially dangerous to such person's health. Such certificate must be signed by the customer and state that such customer is unable to pay in full the amount of the charges due for gas service or is unable to pay by installments. A certification shall expire on the thirty-first day from the date of execution by the physician. Such certification may be renewed no more than three (3) times for an additional thirty (30) day period each. Upon renewal of the certification, the gas utility shall advise the customer that he may wish to call the local social service agency to determine what public or private assistance may be available to him.
 4. The availability of investigation and review of any unresolved dispute by the ~~Commission Staff~~ ORS and include the ~~Commission's~~ ORS's toll free telephone number.

b. Not more than two (2) business days prior to termination of service, the gas utility shall make reasonable efforts either by telephone or in person to contact the customer to notify him that his service is subject to termination for non-payment. Alternatively, not more than three (3) business days prior to termination of service, the gas utility shall notify the customer by mail that he is subject to termination of service for non-payment. The gas utility shall maintain records of the efforts made to contact such customers. Termination of service may be delayed in case of inclement weather, emergencies or operational conflicts.

c. The gas utility shall provide for the arrangement of a deferred payment plan to enable a residential customer to make payment by installments where such customer is unable to pay the amount due for gas service. The deferred payment plan shall require the affected customer to maintain his account current and pay not less than 1/6 of the outstanding balance for a period not to exceed six months. The outstanding balance may include the late payment charge authorized by R.103-439(3). Service to such customer shall not be terminated unless the gas utility has informed the customer that such deferred payment plan is available. Any agreement to extend or defer a payment cut off date by more than five work days is a deferred payment plan. If a customer fails to conform to the terms and conditions of such deferred payment plan, the gas utility may terminate service upon three (3) days written notice, if personally delivered, or upon five (5) days notice by mail.

d. If a residential customer informs the utility that he is unable to make payment in full on his account or to make arrangements for the satisfaction of the balance of his account through a deferred payment plan, the gas utility shall advise the customer that he may wish to call the local social service agency to determine what public or private assistance may be available to him.

e. The gas utility shall maintain a record of all deferred payment plans established with customer subject to termination for a period of two (2) years.

f. The gas utility shall provide a copy of the termination notice to any third party identified by the customer upon establishment of the service account or at any time thereafter.

g. The gas service may be terminated only on Monday through Thursday between the hours of 8:00 a.m. and 4:00 p.m., unless provisions have been made for the availability of the acceptance of payment and the reconnection of service. Gas service may not be terminated on the day preceding any day on which the gas utility's collection offices are closed, unless provisions have been made for the availability of the acceptance of payment and the reconnection of service. All employees of gas utilities assigned to terminate service shall be authorized to accept payment from customers subject to termination of service or in lieu thereof, at the utilities' option, allow such customer at least one full working day beyond the initial date set for termination the opportunity to make satisfactory arrangements on the account at the offices of the utility; provided, however, that in certain areas where it has been determined by the utility that the safety

of its employees warrants it, those employees shall not be required to accept payments from customers subject to termination.

SUBARTICLE 5

ENGINEERING

103-460. Criteria for Good Engineering Practice.

The gas plant of a gas utility shall be constructed, installed, maintained, and operated in accordance with good engineering practices and regulations included by reference as part of these rules to assure, as far as reasonably possible, continuity of service, uniformity in the quality of service furnished, and the safety of persons and property.

103-461. Acceptable Standards.

Unless otherwise specified by the Commission, after hearing is requested, the gas utility shall use the applicable provisions in the publications listed below as operational references, where applicable, and as standards of accepted good engineering practices.

- a. The latest edition of the American Standard Code for "Gas Transmission and Distribution Piping Systems", ANSI B31.8.
- b. The latest edition of the American Standards Association Pamphlet, ASA Z21.30, "Installation of Gas Appliances and Gas Piping in Buildings", or the latest edition of the National Board of Fire Underwriters publication NFPA No. 54, "Piping, Appliances and Fittings for City Gas".
- c. The current edition of the NFPA No. 59, "The Storage and Handling of Liquefied Petroleum Gases at Utility Gas Plants".
- d. "Standard Methods of Gas Testing", Circular No. 48, National Bureau of Standards, 1961. (The applicable portions of this Circular have been substantially reproduced in the American Meter Company Handbook E-4, covering the testing of positive displacement meters).
- e. "Testing Large Capacity Rotary Gas Meters", Research Paper No. 1741, National Bureau of Standards Journal of Research, September, 1946.
- f. "Orifice Metering of Natural Gas", Report No. 3 of the AGA Gas Measurement Committee.
- g. "Standard Method of Test for Calorific Value of Gaseous Fuels by Water-Flow Calorimeter", American Society for Testing Materials, Standard D 900-55.
- h. The current edition of NFPA No. 59A, "Storage and Handling of Liquefied Natural

Gas".

103-462. Acceptable References.

The following publications are considered by this Commission to be acceptable references:

a. "Accuracy of the Recording Gas Calorimeter When Used With Gases of High BTU Content", by John H. Eisemen, National Bureau of Standards, and Elwin A. Potter, Gas Inspection Bureau of the District of Columbia, AGA Publication No. CEP-55-13.

b. Reports prepared by the Practical Methods Committee of the Appalachian Gas Measurement Short Course, West Virginia University, as follows:

(1) Report No. 1, "Method of Testing Large Capacity Displacement Meters".

(2) Report No. 2, "Testing Orifice Meters".

(3) Report No. 3, "Designing and Installing Measuring and Regulating Stations".

(4) Report No. 4, "Useful Tables for Gas Men".

(5) Report No. 5, "Prover Room Practices".

103-463. Adequacy of Service.

The source of supply and transmission facilities for gas, and/or production and/or storage capacity of the gas utility's plant, supplemented by the gas supply regularly available from other sources, must to the extent reasonably practicable, be sufficiently large to meet all reasonably expectable demands for firm service, unless otherwise authorized by the Commission.

103-464. Inspection of Plant.

Each gas utility shall adopt a program of inspection of its gas plant in order to determine the necessity for replacement and repair. The frequency of the various inspections shall be based on the gas utility's experience and accepted good practice.

103-465. Abandonment of Facilities.

1. Service Lines. Each gas system shall conduct a study at intervals not exceeding twelve (12) months to determine the number of inactive service lines in their system and shall take necessary steps to meet the following:

a. Inactive service lines for which there is no definite plan for future use or reasonable possibility for future use or are found to be in unsafe condition shall be physically

disconnected from the gas supply at the main, purged and the open pipe ends shall be sealed.

b. Inactive service lines for which there is a definite plan for future use or a reasonable possibility for future use may remain connected to the gas supply at the main if such lines are found to be in safe condition, provided that in addition to maintaining such lines in accordance with all other applicable requirements, such lines be monitored at intervals not exceeding twelve (12) months by leakage survey or other means adequate to detect conditions detrimental to public safety.

c. Service lines need not be purged when the volume of gas is so small that there is no potential hazard.

SUBARTICLE 6

INSPECTION AND TESTS

103-470. Utility Inspection and Tests.

A. Each gas utility shall make such tests as are prescribed under these rules with such frequency and in such manner and at such places as is herein provided or as may be approved or ordered by the Ecommission. Unless otherwise directed by the Ecommission, the methods and apparatus recommended by the National Bureau of Standards in the latest edition of its Circular No. 48, "Standard Methods of Gas Testing" may be used.

B. When the gas itself is to be tested pursuant to these rules, a "cubic foot" shall mean the quantity of gas necessary to fill a cubic foot of space when the gas is at an absolute pressure of 14.73 pounds per square inch and at a temperature of sixty (60) degrees Fahrenheit. For purposes of measurement of gas to a customer a cubic foot of gas shall be taken to be the amount of gas which occupies a volume of one cubic foot under the conditions existing in such customer's meter as and where installed.

103-471. Periodic Tests.

These test periods may be extended upon application and approved by the Ecommission, providing that the gas utility can prove by its own records that different test periods are adequate for the protection of the public. Meters may be tested and calibrated in accordance with "Sample Meter Testing Plans" approved by the Ecommission; and gas utilities using a "Sample Meter Testing Plan" shall continue to advise the Ecommission of the results of the operation of the plan.

a. Positive Displacement Meters.

(1) Up to 251 c.f./hr. (at .5 in. water column differential pressure with non-absorptive diaphragm)-10 years.

(2) Up to 251 c.f./hr. (at .5 in. water column differential pressure with absorptive type diaphragm)-5 years.

(3) 251 to 3000 c.f./hr (at .5 in. water column differential pressure)-3 years.

(4) Over 3000 c.f./hr. (at .5 in. water column differential pressure)-2 years.

b. Orifice Meters. 6 Months.

c. Turbine Meters. 6 Months.

d. Base Pressure Correcting Devices. 2 Years.

e. Base Volume Correcting Devices. 2 Years.

f. Recording Pressure and Temperature Gauges. 1 Year.

g. Secondary Standards.

(1) Test Bottles, one cubic foot 5 Years.

(2) Dead Weight Testers including Weights 5 Years.

h. Working Standards.

(1) Bell Provers 5 Years.

(2) Flow Provers 5 Years.

(3) Transfer Provers 5 Years.

(4) Laboratory Quality Indicating Pressure Gauges 6 Months.

(5) Laboratory Quality Thermometers 6 Months.

103-472. Meter Testing on Request of Customer.

A. Each gas utility shall, at any time when requested in writing by a customer upon reasonable notice, test the accuracy of the meter in use by him.

B. No deposit or payment shall be required from the customer for such meter test except when the customer requests a meter test within one year after date of installation or of the last previous test of this meter, in which case the customer may be required by the gas utility to deposit an amount, to cover the reasonable cost of such test, as approved by the Commission in the gas utility's tariff or service regulation. The amount so deposited with the gas utility shall be refunded or credited to the customer if the meter is found,

when tested, to register more than two percent fast or slow; otherwise the deposit shall be retained by the gas utility.

C. A customer may request to be present when the gas utility conducts the test on his meter, or if he desires, may send a representative appointed by him. The gas utility shall honor such request.

D. A report giving the name of the customer requesting the test; the date of the request; the location of the premises where the meter has been installed; the type, make, size and serial number of the meter; the date of removal; the date tested; and the result of the test shall be supplied to such customer within a reasonable time after the completion of the test.

103-473. ~~Commission~~ ORS Inspection and Tests.

The ~~Commission~~ ORS shall make tests of meters as follows:

- a. Upon request to the ~~Commission~~ or the ORS by a customer or gas utility.
- b. On receipt of such request the ~~Commission~~ ORS shall notify the gas utility and the gas utility shall not remove or adjust the meter until instructed by the ~~Commission~~ ORS. The gas utility shall furnish to the ~~Commission's~~ ORS's representative such reasonable assistance as may be required.
- c. The customer shall be notified of the test in sufficient time to allow him or his representative to be present.
- d. The ~~Commission~~ ORS shall make a written report of the results of the test to the customer and to the gas utility.

103-474. Facilities and Equipment for Testing.

1. General. Each gas utility shall, unless specifically excused by the ~~Commission~~, provide such laboratory, meter-testing equipment and other equipment and facilities as may be necessary to make the tests required of it by these rules or other orders of the ~~Commission~~. The apparatus and equipment so provided shall be subject to the approval of the ~~Commission~~, and it shall be available at all times for the inspection or use of any member or authorized representative of the ~~Commission~~ ORS.

2. Meter Shop. Each gas utility shall maintain or designate a meter shop for the purpose of inspecting, testing and repairing meters. The shop shall be open for inspection by authorized representatives of the ~~Commission~~ ORS at all reasonable times, and the facilities and equipment, as well as the methods of measurements and testing employed, shall be subject to the approval of the ~~Commission~~. The area within the meter shop used for the testing of meters shall be designed so that the meters and meter testing equipment are protected from drafts and excessive changes in temperature. The meters to be tested

shall be stored in such manner that the temperature of the meters is substantially the same as the temperature of the prover.

3. Working Standards.

A. Each gas utility furnishing metered gas service shall own an approved type of meter prover or designate a meter shop which is equipped with an approved type of meter prover preferably of not less than two cubic feet capacity, equipped with suitable thermometers and other necessary accessories, and it shall maintain such equipment in proper adjustment so that it shall be capable of determining the accuracy of any service meter to within one-half of one percent.

B. Bell provers shall be so placed that they will not be subjected to drafts or excessive temperature variations.

C. Means shall be provided to maintain the temperature of the liquid in bell provers at substantially the same level as the ambient temperature in the prover room.

D. Each gas utility having meters which are too large for testing on a 5 cubic foot bell prover shall use a properly calibrated test meter or a properly designed flow prover for testing the large meters.

E. The accuracy of all provers and methods of operating them will be established from time to time by a representative of the ~~Commission~~ ORS. All alterations, accidents, or repairs which might effect the accuracy of any meter prover or the method of operating it shall be promptly reported in writing to the ~~Commission~~ and the ORS.

F. Working standards must be checked periodically by comparison with a secondary standard.

1. Bell provers must be checked with a cubic foot bottle which has been calibrated by the National Bureau of Standards, unless another standard is authorized by the ~~Commission~~.

2. Transfer and Flow Provers must be checked with a bell prover of adequate capacity which has been calibrated by representatives of the National Bureau of Standards unless another standard is authorized by the ~~Commission~~.

G. Extreme care must be exercised in the use and handling of standards to assure that their accuracy is not disturbed.

H. Each gas utility must have properly calibrated orifices, as may be necessary, to achieve the rates of flow required to test the meters on its system.

4. Special Meters. Any meter, the readings or record of which is based on the differential pressure in such meter or upon the measurement of any portion of the total gas delivered to a customer, shall be tested for accuracy before being placed in service in a manner

satisfactory to the Commission.

103-475. Test Procedures and Accuracies.

1. Pre-Installation Inspection and Tests.

a. Every meter and/or associated metering device shall be inspected, tested and sealed in the meter shop of the gas utility before being placed in service.

b. New or reconditioned meters which have been sealed at the factory need not be resealed in the shop of the gas utility.

2. Post-Removal Inspection and Tests. All meters and/or associated metering devices shall be tested after they are removed from service. Such tests shall be made before the meters and/or associated metering devices are adjusted, repaired, or retired.

3. Leak Tests. Every meter shall be leak tested prior to installation.

a. Each new meter must have been tested by the manufacturer to a minimum of 10 p.s.i.g.

b. Meters removed from service to be used for measuring low pressure gas as defined in RUG-705 shall be tested and subjected to an internal pressure of at least 20" W.C. and checked for the presence of leaks by one of the tests listed under subsection 4 below.

c. Meters removed from service to be used at pressure other than low pressure shall be tested and subjected to an internal pressure of 1.1 times the specified maximum working pressure of the meter and checked for the presence of leaks by one of the tests listed under subsection 4 below.

d. Acceptable Leak Tests

(1) Immersion Tests.

(2) Soap Tests.

(3) Pressure drop test of a type acceptable to the Commission.

4. Operating Pressure Limitations.

A. A meter may not be used at a pressure that is more than 67 percent of the manufacturer's shell test pressure.

B. A rebuilt or repaired tinned steel case meter may not be used at a pressure that is more than 50 percent of the pressure used to test the meter after rebuilding or repairing.

5. Method of Testing. All tests to determine the accuracy of registration of any gas

service meter shall be made with a suitable meter prover.

The tests of any unit of metering equipment shall consist of a comparison of its accuracy with the accuracy of a standard. The ~~Commission~~ ORS will use the applicable provisions of the standards listed in 103-461 as criteria of accepted good practice in testing meters.

All meters and/or associated metering devices, when tested, shall be adjusted as closely as possible to the condition of zero error. All tolerances listed below are to be interpreted as maximum permissible variations from the condition of zero error.

a. Diaphragm, Displacement, Rotary, and Turbine Meters

(1) Accuracy at Test Points

FLOW ADJUSTED TO WITHIN

Check Flow (20% of rated meter capacity) 98.5%--100.5%

Full Flow (Equal to or in excess of operating 98.5%--100.5%

load requirement)

(2) Actual Accuracy

The accuracy as determined by averaging the results at the check and open rated flow.

(3) Overall Accuracy

The accuracy at a check flow and the accuracy at not less than open rated flow shall agree within one percent.

b. Orifice Meters

Accuracy at test points must be within one-half of one percent (1/2 %) plus or minus.

c. Timing Devices

All recording type meters or associated instruments which have a timing element that serves to record the time at which the measurement occurs must be adjusted as far as practicable so that the timing element is not in error by more than plus or minus five minutes in 24 hours.

SUBARTICLE 7

STANDARDS AND QUALITY OF SERVICE

103-480. Quality of Service.

A. Each gas utility shall provide the best gas service that can be reasonably expected from the facilities of that gas utility. When the quality of gas service falls below what can be reasonably expected, the gas utility shall, as soon as practicable, provide the proper gas service.

B. All gas supplied to customers shall be substantially free of impurities which may cause corrosion of mains or piping, or form corrosive or harmful fumes when burned in a properly designed and adjusted burner.

103-481. Interruption of Service.

A. Each gas utility shall make reasonable efforts to avoid interruptions of service but when interruptions occur, service shall be re-established within the shortest time practicable, consistent with safety of its employees, customers and the general public.

B. Planned interruptions shall be made at a time that will not cause unreasonable inconvenience to customers and shall be preceded by adequate notice to those who will be affected.

103-482. Restrictions on Use of Service.

A. The gas utility may impose reasonable restrictions on the use of service during periods of shortage of supply, excessive demand or other difficulty which jeopardizes the supply of service to any group of customers.

B. Restrictions on the use of service made necessary by the shortage of supply shall be made in conformity with the gas utility's curtailment plan approved by the Commission.

C. The gas utility may impose reasonable restrictions on the use of service by customers who create conditions which prevent the gas utility from supplying satisfactory service to that customer, or to other customers.

D. If a gas utility finds that it is necessary to restrict the use of service, it shall notify its customers, and give the Commission and the ORS written notice, except in emergencies, before such restriction becomes effective. Such notifications shall specify but not be limited to:

1. The reason for the restriction.
2. The nature and extent of the restriction of use by certain classes of customers, etc.
3. The date such restriction is to go into effect.
4. The probable date of termination of such restriction.

103-483. Special Tests.

Before permitting the initial use of gas at any location, a certificate of inspections and tests of the customer-owned piping shall be furnished the gas system by the customer or by the local inspecting authority. All such inspections and tests shall be made in accordance with applicable local codes. In the absence of a local code such inspections and tests shall be in accordance with minimum standards set forth in the latest edition of Southern Standard Gas Code, and the customer or his contractor shall furnish the gas system a certificate of such inspections and tests. The gas system shall advise the customer of this requirement upon initial application for gas service. When gas is turned on by the gas system, the gas system shall take reasonable precaution to prevent potential hazards and, as a minimum precaution, shall make a check for leakage using the gas meter in accordance with a procedure at least equal to that described in the latest edition of the American Standard Installation of Gas Appliances and Gas Piping ASA Z21.30. A visual examination of gas utility owned exposed piping and components thereof, along with soil and vegetation conditions in the general vicinity of buried piping and components shall be conducted as a minimum precaution for the discovery of any existing or potential hazards.

103-484. Low Pressure Requirements.

The maximum allowable operating pressure for a low pressure distribution system shall not exceed a pressure which would cause the unsafe operation of any connected and properly adjusted low pressure gas burning equipment. The gas system shall specify a standard pressure for each district, division or community served, and such pressure shall be reasonably constant within the following limits:

- a. The variation in pressure at the customer's meter in any one 24-hour period shall be not greater than 4" W. C.
- b. The maximum pressure shall be not greater than twice the specified pressure but in no event greater than the pressure indicated in subsection d. below.
- c. The minimum pressure shall be not less than half the specified pressure indicated in subsection d. below.
- d. The absolute minimum pressures at the customer's service meter shall be within the limits established for the type of gas, except for any customer whose equipment requires and is designed for pressures in excess of the maximum pressures listed below, then the pressure shall be so regulated in accordance with practices established in RUG-502.

MINIMUM STANDARD

MAXIMUM STANDARD DELIVERY PRESSURE

DELIVERY PRESSURE SHALL NOT BE LESS

TYPE OF GAS SHALL NOT EXCEED THAN

Natural Gas 12" W.C. 3" W.C.

L. P. Gas (Undiluted) 12" W.C. 9" W.C.

L. P. Air Gas 10" W.C. 4" W.C.

Manufactured & Mixed Gas 9" W.C. 3" W.C.

103-485. System Pressure Monitoring.

A. Each gas system shall maintain on its distribution system in each city in which it supplies gas a sufficient number of recording devices, but not less than one, to insure detections of abnormal system pressures. No gas system shall maintain less than two such recording pressure gauges of which one should be portable.

B. Each gas system shall keep records of each test of pressures in various parts of its distribution systems. The records obtained shall include as a minimum, the date, time, and location where the pressure was taken and shall be retained for a two (2) year period.

SUBARTICLE 8

SAFETY

103-490. General.

A. Under the authority of S.C. Code Ann. Section 58-5-970 (1976), the ~~C~~ommission hereby adopts the Federal Minimum Safety Standards for the Transportation of Natural and Other Gas, 49 C.F.R. Section 190, Section 191, Section 192, Section 193, and Section 199, as may be amended from time to time, except where otherwise authorized by the ~~C~~ommission.

B. Under the authority of S. C. Code Ann., § 58-5-980 (1976), the ~~C~~ommission herein establishes additional minimum safety standards, as noted infra. The following list indicates those sections of the Federal Standards and corresponding sections of these Rules and Regulations which effect a modification:

1. 49 C.F.R. § 192.359. Customer Metering Installations: Operating Pressure. See, 103-475(3) and 103-475(4).

2. 49 C.F.R. § 192.615. Emergency Plans. See, 103-491, 103-492 and 103-494.
3. 49 C.F.R. § 192.623. Maximum and Minimum Allowable Operating Pressure: Low-Pressure Distribution Systems. See, 103-484.
4. 49 C.F.R. § 192.723. Distribution Systems: Leakage Surveys and Procedures. See, 103-493.
5. 49 C.F.R. § 192.727. Abandonment or Inactivation of Facilities. See, 103-465.
6. 49 C.F.R. § 192.741. Pressure Limiting and Regulating Stations: Telemetry or Recording Gauges. See, 103-485.
7. 49 C.F.R. Subpart J. Test Requirements. See, 103-483.

Such modifications reflect additional requirements to those established by 49 C.F.R. § 192, and are not to be construed as deleting the existing Federal requirement.

C. Under the authority of S. C. Code Ann., § 58-5-960 (1976), the safety standards adopted by the ~~C~~ommission apply to all gas systems within the State, including municipalities, gas authorities, public service districts and other political subdivisions of this State not subject to economic regulation by the ~~C~~ommission.

D. As criteria of accepted good safety practice, in addition to those of 49 C.F.R. § 192 (1973), the ~~C~~ommission will use the applicable provisions of the standards listed in 103-461.

103-491. Protective Measures.

A. Each gas system shall exercise reasonable care to reduce the hazards to which its employees, its customers, and the general public may be subjected.

B. The gas system shall give reasonable assistance to the ~~Commission~~ ORS in the investigation of the cause of accidents and shall give reasonable assistance to the commission and the ORS in the determination of suitable means of preventing accidents.

C. Each gas system shall maintain a summary of all reportable accidents arising from its operations.

103-492. Safety Program.

Each gas system shall adopt and execute a safety program, fitted to the size and type of its operations. As a minimum, the safety program should:

- a. Require employees to use suitable tools and equipment in order that they may perform

their work in a safe manner.

- b. Instruct employees in safe methods of performing their work.
- c. Instruct employees, who, in the course of their work are subject to the hazard of electrical shock, asphyxiation or drowning, in accepted methods of artificial respiration.
- d. Establish liaison with appropriate public officials including fire and police officials in anticipation of a potential emergency.
- e. Establish an educational program to enable customers and the general public to recognize and report a gas emergency to the appropriate officials.

103-493. Leakage.

1. General. Any notice to the gas system of a leak or odor or notification of damage to gas facilities by contractors or other outside sources shall constitute the need for immediate action by the gas system.

2. Classification. Each gas system shall establish procedures for classifying and repairing leaks meeting the requirements of this section:

Grade 1--Grade 1 means a leak that represents an existing or probable hazard to persons or property and requires immediate repair or continuous action until the conditions are no longer hazardous.

Grade 2--Grade 2 means a leak that is recognized as being nonhazardous at the time of detection but requires scheduled repair based on probable future hazard.

Grade 3--Grade 3 means a leak that is nonhazardous at the time of detection and can be reasonably expected to remain nonhazardous.

3. Leakage Surveys.

All buried piping not protected against corrosion in accordance with 49 C.F.R. Section 192, Subpart I, must be subjected to instrument leakage surveys as frequently as necessary, but at intervals not exceeding twelve (12) months.

4. Vegetation Leakage Surveys.

Vegetation type leak surveys are prohibited.

103-494. Interruptions in Service.

A. Each gas system shall adopt and file with the Commission, for approval, and provide a copy to the ORS procedures to protect customers during periods when operating

conditions require interruptions in service due to scheduled or unscheduled curtailments, line breakage, equipment malfunctions, and force majeure conditions.

B. Such procedures shall insure that adequate safety precautions are taken to prevent hazards to which gas system employees, gas system customers and the general public may be subjected.